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|-----------------|-------------|----------------------|---------------------|------------------|
| 10/071,667      | 02/08/2002  | Kathy K. Wang        | OSTEONICS 3.0-380   | 4016             |

530 7590 03/14/2005

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| EXAMINER |
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PRIDDY, MICHAEL B

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| ART UNIT | PAPER NUMBER |
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3732

DATE MAILED: 03/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/071,667

Applicant(s)

WANG ET AL.

Examiner

Michael B Priddy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6, 8-18, 79 and 82-103 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4, 6, 8-18, 79, 98 and 101-103 is/are allowed.
- 6) ☒ Claim(s) 82-97, 99 and 100 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 82-97 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 82 there exists an inconsistency between the language in the preamble and that of the body of the claim, thus making the scope of the claim unclear. In the preamble, line 1, applicant recites "a porous metal scaffold" with the implantable medical device being only functionally recited, i.e. "for use in an implantable medical device...", thus indicating that the claim is directed to the subcombination, "a porous metal scaffold". However, in lines 4-5, Applicant positively recites the implantable medical device as part of the invention, i.e. "a tissue contacting surface of the medical device, the metal webs being thicker on a side thereof facing towards the tissue contacting surface", thus indicating that the combination, scaffold and medical device, is being claimed. As such, it is unclear whether applicant intends to claim the subcombination or combination. Applicant is hereby required to indicate to which, combination or subcombination, the claim is intended to be directed, and amend the claim such that the language thereof is consistent with this intent. For examination

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purposes claim 82 will be considered as being drawn to the combination, porous metal scaffold and implantable medical device.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 99 is rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al. Park et al. teaches a porous metal scaffold comprising: a porous metal foam network (column 6) having an open cell structure wherein the openings of each cell are formed by metal webs (definition of Foam in column 5), at least some of the webs covered with at least one layer of metal particles (support coating of column 7 and particularly line 16 "very fine aluminum powder"), the metal particles being bonded to the metal webs, wherein said metal webs form a continuous inner skeleton of said porous metal scaffold and the size of the cell openings *may* be varied by bonding additional layers of metal particles to said at least one layer. Hence, Park et al. teaches all of the limitations of the present invention except the pore size ranges from 100 microns to 1000 microns with a plurality of pores having a size greater than about 100 microns and that the metal of the particles is selected from the group consisting of titanium alloy, cobalt chrome alloy, niobium and tantalum.

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the webs of Park such that the pore size ranged from 100 microns to 1000 microns with a plurality of pores having a size greater than about 100 microns, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). It would also have been obvious to one of ordinary skill in the art at the time of the present invention to select the metal of the particles from the group consisting of titanium alloy, cobalt chrome alloy, niobium and tantalum since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Claim 100 is rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al. Park et al. teaches a porous metal scaffold comprising: a porous metal foam network (column 6) having an open cell structure wherein the openings of each cell are formed by metal webs (definition of Foam in column 5), at least some of the webs covered with at least one layer of metal particles (support coating of column 7 and particularly line 16 "very fine aluminum powder"), the metal particles being bonded to the metal webs, wherein said metal webs form a continuous inner skeleton of said porous metal scaffold and the size of the cell openings *may be varied* by bonding additional layers of metal particles to said at least one layer. Hence, Park et al. discloses the claimed invention except for the metal of the particles is selected from the group consisting of titanium alloy, cobalt chrome alloy, niobium and tantalum.

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to select the metal of the particles from the group consisting of titanium alloy, cobalt chrome alloy, niobium and tantalum, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

***Allowable Subject Matter***

Claims 1-4, 6, 8-18, 79, 98 and 101-103 are allowed.

Claims 82-97 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

***Conclusion***

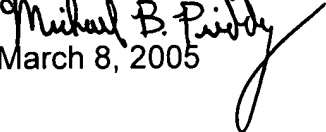
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael B. Priddy whose telephone number is (571) 272-4717. The examiner can normally be reached on Mon.-Fri. 8 a.m. - 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael B. Priddy

  
March 8, 2005